

Baby App

-Functionalities

- Feeding Tracker: Allow parents to log breastfeeding or bottle-feeding sessions, indicating which side the baby is fed on and for how long. For bottle-fed babies, the volume consumed could be logged.
- Diaper Change Tracker: Allow logging of each diaper change, noting whether it was wet or dirty, and any other observations.
- Sleep Tracker: Help parents track the baby's sleep patterns, including nap times and durations.
- Growth Tracker: Enable parents to log the baby's weight, height, and head circumference, and visualize this data on a growth chart compared to standard percentiles.
- Milestone Tracker: Provide a checklist of developmental milestones that parents can check off as their baby achieves them.
- Vaccination and Doctor Visits Tracker: A scheduler and tracker for doctor's appointments and vaccinations could be very useful.
- Baby Journal: Allow parents to write down their thoughts, observations, and special moments, perhaps even integrating with the device's camera for photos and videos.
- Feeding and Sleep Schedule Suggestions: Based on logged data, the app could suggest optimal feeding times, amounts, and sleep schedules.
- Fussy Alert: Based on feeding and sleeping data, the app could predict when the baby might be getting hungry or tired, helping to prevent meltdowns.
- Education: Include tips and articles on baby care, feeding, health issues, and development to educate new parents.
- Community: A forum or chat feature where parents can connect, ask questions, and share experiences could be beneficial.
- Integration with Smart Devices: If possible, consider integrating with smart devices such as baby monitors, feeding pumps, smart diapers, or sleep trackers.

- Database

ERD:

Users

- UserId (PK)
- UserName

- Email
- PasswordHash
- \
- \ One-to-Many (---<)
- \

FeedingLogs

- LogId (PK)
- UserId (FK)
- DateTimeFed
- AmountFed
- Notes

Users

- UserId (PK)
- UserName
- Email
- PasswordHash
- \
- \ One-to-Many (---<)
- \

SleepLogs

- LogId (PK)
- UserId (FK)
- SleepStart
- SleepEnd
- Notes

Users

- UserId (PK)
- UserName
- Email
- PasswordHash
- \
- \ One-to-Many (---<)
- \

DiaperChangeLogs

- LogId (PK)
- UserId (FK)
- DateTimeChanged

- DiaperCondition
- Notes

Users

- UserId (PK)
- UserName
- Email
- PasswordHash
- \
- \ One-to-Many (---<)
- \

GrowthLogs

- LogId (PK)
- UserId (FK)
- LogDate
- Weight
- Height
- HeadCircumference
- Notes

Users

- UserId (PK)
- UserName
- Email
- PasswordHash
- \
- \ One-to-Many (---<)
- \

MilestoneLogs

- LogId (PK)
- UserId (FK)
- Milestone
- DateReached
- Notes

Users

- UserId (PK)
- UserName
- Email

- PasswordHash
- \
- \ One-to-Many (---<)
- \

VaccinationLogs

- LogId (PK)
- UserId (FK)
- Vaccination
- DateAdministered
- Notes

SQL Server:

```
CREATE TABLE Users (
    UserId INT PRIMARY KEY IDENTITY,
    UserName NVARCHAR(50) NOT NULL,
    Email NVARCHAR(100) UNIQUE NOT NULL,
    PasswordHash NVARCHAR(128) NOT NULL -- Make sure to hash
+ salt passwords!
    -- Add other fields as necessary (e.g., Name, DateOfBirth, etc.)
);
```

```
CREATE TABLE FeedingLogs (
    LogId INT PRIMARY KEY IDENTITY,
    UserId INT NOT NULL,
    DateTimeFed DATETIME NOT NULL,
    AmountFed DECIMAL(5, 2) NOT NULL,
    Notes NVARCHAR(255),
    FOREIGN KEY (UserId) REFERENCES Users(UserId)
);
```

```
CREATE TABLE SleepLogs (
    LogId INT PRIMARY KEY IDENTITY,
    UserId INT NOT NULL,
    SleepStart DATETIME NOT NULL,
    SleepEnd DATETIME NOT NULL,
    Notes NVARCHAR(255),
    FOREIGN KEY (UserId) REFERENCES Users(UserId)
);
```

```
CREATE TABLE Users (
    UserId INT PRIMARY KEY IDENTITY,
```

```
    UserName NVARCHAR(50) NOT NULL,  
    Email NVARCHAR(100) UNIQUE NOT NULL,  
    PasswordHash NVARCHAR(128) NOT NULL -- Make sure to hash  
+ salt passwords!  
    -- Add other fields as necessary (e.g., Name, DateOfBirth, etc.)  
);
```

```
CREATE TABLE FeedingLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    DateTimeFed DATETIME NOT NULL,  
    AmountFed DECIMAL(5, 2) NOT NULL,  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

```
CREATE TABLE SleepLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    SleepStart DATETIME NOT NULL,  
    SleepEnd DATETIME NOT NULL,  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

```
CREATE TABLE DiaperChangeLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    ChangeTime DATETIME NOT NULL,  
    ChangeType NVARCHAR(50) NOT NULL, -- For example: 'wet',  
'dirty', etc.  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

```
CREATE TABLE GrowthLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    LogDate DATE NOT NULL,  
    Weight DECIMAL(5, 2),  
    Height DECIMAL(5, 2),  
    HeadCircumference DECIMAL(5, 2),  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)
```

);

```
CREATE TABLE MilestoneLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    Milestone NVARCHAR(100) NOT NULL,  
    DateReached DATE,  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

```
CREATE TABLE VaccinationLogs (  
    LogId INT PRIMARY KEY IDENTITY,  
    UserId INT NOT NULL,  
    Vaccination NVARCHAR(100) NOT NULL,  
    DateAdministered DATE,  
    Notes NVARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

MySQL:

```
CREATE TABLE Users (  
    UserId INT AUTO_INCREMENT PRIMARY KEY,  
    UserName VARCHAR(50) NOT NULL,  
    Email VARCHAR(100) UNIQUE NOT NULL,  
    PasswordHash VARCHAR(128) NOT NULL, -- Make sure to hash +  
    salt passwords!  
    -- Add other fields as necessary (e.g., Name, DateOfBirth, etc.)  
);
```

```
CREATE TABLE FeedingLogs (  
    LogId INT AUTO_INCREMENT PRIMARY KEY,  
    UserId INT NOT NULL,  
    DateTimeFed DATETIME NOT NULL,  
    AmountFed DECIMAL(5, 2) NOT NULL,  
    Notes VARCHAR(255),  
    FOREIGN KEY (UserId) REFERENCES Users(UserId)  
);
```

```
CREATE TABLE SleepLogs (  
    LogId INT AUTO_INCREMENT PRIMARY KEY,  
    UserId INT NOT NULL,  
    SleepStart DATETIME NOT NULL,
```

```

        SleepEnd DATETIME NOT NULL,
        Notes VARCHAR(255),
        FOREIGN KEY (UserId) REFERENCES Users(UserId)
    );

CREATE TABLE Users (
    UserId INT AUTO_INCREMENT PRIMARY KEY,
    UserName VARCHAR(50) NOT NULL,
    Email VARCHAR(100) UNIQUE NOT NULL,
    PasswordHash VARCHAR(128) NOT NULL, -- Make sure to hash +
    salt passwords!
    -- Add other fields as necessary (e.g., Name, DateOfBirth, etc.)
);

CREATE TABLE FeedingLogs (
    LogId INT AUTO_INCREMENT PRIMARY KEY,
    UserId INT NOT NULL,
    DateTimeFed DATETIME NOT NULL,
    AmountFed DECIMAL(5, 2) NOT NULL,
    Notes VARCHAR(255),
    FOREIGN KEY (UserId) REFERENCES Users(UserId)
);

CREATE TABLE SleepLogs (
    LogId INT AUTO_INCREMENT PRIMARY KEY,
    UserId INT NOT NULL,
    SleepStart DATETIME NOT NULL,
    SleepEnd DATETIME NOT NULL,
    Notes VARCHAR(255),
    FOREIGN KEY (UserId) REFERENCES Users(UserId)
);

CREATE TABLE DiaperChangeLogs (
    LogId INT AUTO_INCREMENT PRIMARY KEY,
    UserId INT NOT NULL,
    ChangeTime DATETIME NOT NULL,
    ChangeType VARCHAR(50) NOT NULL, -- For example: 'wet',
    'dirty', etc.
    Notes VARCHAR(255),
    FOREIGN KEY

```

-Tech Stack

Frontend: Angular
Backend: Java/C#
database: SQL Server, MySQL